09,710,703 Application No.

(to be used for all correspondence after initial filing)

TRANSMITTAL FORM

November 10, 2000 Filing Date RECEIVED John Josef Hench First Named Inventor Art Unit 2661 APR 1 4 2004

Unknown

Total Number of Pages in This Submission

8

Examiner Name

Technology Center 2600 Attorney Docket Number 6515P029

	ENCLOSURES (check all that apply)					
Fee Transmittal F	orm	Drawing(s)	After Allowance Communication to Group			
Fee Attach	ed	Licensing-related Papers	Appeal Communication to Board of Appeals and Interferences			
Amendment / Res	sponse	Petition	Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)			
After Final Affidavits/d	leclaration(s)	Petition to Convert a Provisional Application	Proprietary Information			
Extension of Time	e Request	Power of Attorney, Revocation Change of Correspondence Address	Status Letter Other Enclosure(s)			
Express Abandor	nment Request	Terminal Disclaimer Request for Refund	(please identify below): Twenty-seven (27)			
Information Disclo		CD, Number of CD(s)	References Cited; Postcard.			
Certified Copy of Document(s)						
Response to Missing Parts/ Incomplete Application Basic Filing Fee Declaration/POA		Remarks				
Response Parts unde 1.52 or 1.5	to Missing er 37 CFR 53					
	SIGNATUR	E OF APPLICANT, ATTORNEY, OR AG	ENT			
Firm or	•	ta, Reg. No. 46,145				
Individual name	BLAKELY, S	SOKOLOFF, TAYLOR & ZAFM.	AN LLP			
Signature	Sanject	Dutta				
Date April 7, 2004						
CERTIFICATE OF MAILING/TRANSMISSION						
I hereby certify that this correspondence is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.						
Typed or printed na	me Geneva Wa	11s)				
Signature	/80	duna / l'Id V la / 1	Date April 7, 2004			

Based on PTO/SB/21 (02-04) as modified by Blakely Solokoff, Taylor & Zafman (wlr) 02/10/2004. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

ACE TO ANGMITTAL		Complete if Known						
EE TRANSMITTAL	ſ	Application Number 09,710,703						
for FY 2004		Filing Dat	е		Nov	ember 10,	RECEI	AED
Effective 01/01/2004. Patent fees are subject to annual revision.		First Nam	ed Inv	entor		Josef Hen	ch	
Applicant claims small entity status. See 37 CFR 1.27.		Examiner	Name	e	Unk	nown	APR 1 4	2004
TOTAL AMOUNT OF PAYMENT (\$)		Art Unit			266			
TOTAL AMOUNT OF PAYMENT (\$)		Attorney [Docke	t No.	6515	P029 Te 0	chnology C	enter 260
METHOD OF PAYMENT (check all that apply)				EE	E CALCULATI	ON (continue	od)	
WETHOD OF PATMENT (Check all that apply)	1	ADDITIO				ON (continue	ea)	
☐ Check ☐ Credit card ☐ Money ☐ Other ☒ None	3.	ADDITIO	NAL	FEES				
Deposit Account	Lar	ge Entity	Sma	II Entity	-			
* Deposit	Fee		Fee	Fee (\$)	E	Description		Con Daid
Account Number 02-2666			i			Description		Fee Paid
Deposit	1051 1052		2051 2052	65 25	Surcharge - late filing Surcharge - late prov			
· Account Blakely Sokoloff Taylor & Zafman LLP					cover sheet.	-		
Name	2053 1812		2053 1812	130 2.520	Non-English specification For filing a request for		nation	
The Commissioner is authorized to: (check all that apply)	1804		1804		Requesting publication	•	io.iOII	
Charge fee(s) indicated below Credit any overpayments		·	1001	•	Examiner action			
Charge any additional fee(s) or underpayment of fees as required under 37 CFR §§ 1.16, 1.17, 1.18 and 1.20.	1805	5 1,840°	1805	1,840 *	Requesting publication	n of SIR after		
Charge fee(s) indicated below, except for the filling fee to the above-identified deposit account	4054	110	2054	55	Extension for reply will	hio first month		
FEE CALCULATION	1251 1252		2251		Extension for reply wit			
1. BASIC FILING FEE	1252		2252		Extension for reply wit			
Large Entity Small Entity	1254		2254	740	Extension for reply wit			
Fee Fee Fee Fee Description Fee Paid	1255		2255	605	Extension for reply wit			
Code (5)	1404		2401	165	Notice of Appeal			
1001 770 2001 385 Utility filing fee	1402		2402	165	Filing a brief in suppo	rt of an appeal		
1002 340 2002 170 Design filing fee	1403		2403	145	Request for oral hear			
1003 530 2003 265 Plant filing fee 1004 770 2004 385 Reissue filing fee	1451		2451	1,510	Petition to institute a	_	ling	
1005 160 2005 80 Provisional filing fee	1452	110	2452	55	Petition to revive - un	avoidable	-	
	1453	1,330	2453	665	Petition to revive - un	intentional		
SUBTOTAL (1) (\$)	1501	1,330	2501	665	Utility issue fee (or rei	issue)		
2. EXTRA CLAIM FEES Extra Fee from	1502	480	2502	240	Design issue fee			
Claims below Fee Paid	1503	640	2503	320	Plant issue fee			
Total Claims	1460	130	2460	130	Petitions to the Comm	nissioner		
Claims X X	1807		1807	50	Processing fee under	• • •		
Multiple Dependent	1806		1806	180	Submission of Informa		tmt	
Large Entity Small Entity	8021	1 40	8021	40	Recording each pater property (times number			
Fee Fee Fee Fee Fee <u>Fee Description</u> Code (5) Code (5)	1809	770	1809	385	Filing a submission af			
1202 18 2202 9 Claims in excess of 20	1 1009		1009		(37 CFR § 1.129(a))	,		
1201 86 2201 43 Independent claims in excess of 3	1810	770	2810	385	For each additional in- examined (37 CFR §			
1203 290 2203 145 Multiple Dependent claim, if not paid	1801	770	2801	385	Request for Continued		F)	
1204 86 2204 43 "Reissue independent claims over original patent	1801		1802		Request for expedited	*	-,	
1205 18 2205 9 **Reissue claims in excess of 20 and over	1	fee (specify)	1002	300	of a design application			
original patent	J. Ciner	.co (opecity)						
SUBTOTAL (2) (\$)								
**or number previously paid, if greater, For Reissues, see below	*Reduce	ed by Basic Filing	Fee Pai	t	:	SUBTOTAL (3)	(\$)	
SUBMITTED BY						Comp	lete (if applic	able)
Name (Print/Type) Sanjeet K. Dutta		Registratio Attomey/Age		4	6,145	Telephone	(408) 94	
Signature Sanject Dutta			•	.		Date	04/0	7/04

Docket No.: 6515P029

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Re the Application of:

JOHN JOSEF HENCH, ET AL.

Application No.: 09,710,703

Filed: November 10, 2000

For: Method And Apparatus For Impairment

Diagnosis In Communication Systems

Art Group: 2661

RECEIVED

Examiner:

Unknowr

APR 1 4 2004

Technology Center 2600

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §1.97

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

In accordance with the duty of disclosure, enclosed is a copy of IDS Citation Form PTO/SB/08 or PTO-1449, together with copies of the documents cited on that form, except for copies not required to be submitted (e.g., copies of U.S. patents and U.S. published patent applications need not be enclosed for applications filed after June 30, 2003). This IDS and IDS Citation Form are being submitted before the mailing of a first Office Action. It is respectfully requested that the cited references be considered and that the enclosed copy of PTO/SB/08 be initialed by the Examiner to indicate such consideration and a copy thereof returned to applicant(s).

It is hereby stated that no item of information contained in the Information Disclosure Statement was cited in a patent office in a counterpart application, and, to the knowledge of the undersigned, after making reasonable inquiry, no item of information contained in the Information Disclosure Statement was known to any individual associated with the filing or prosecution of the subject application more than three months prior to the filing of the Information Disclosure Statement.

The submission of this Information Disclosure Statement is not to be construed as a representation that a search has been made in the subject application and is not to be construed as an admission that the information cited in this statement is material to patentability.

Please charge any fees due to Deposit Account 02-2666. A duplicate copy of the Fee Transmittal (PTO/SB/17) is enclosed for this purpose.

Respectfully	submitted,
--------------	------------

Yawa Walls va Walls

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Date: April 07, 2004

Sanjec K. Dutta, Reg. No. 46,145

12400 Wilshire Boulevard, 7th Floor Los Angeles, CA 90025

Telephone: (408) 947-8200

I hereby certify that this correspondence is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

- - -

Date

bstitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 3

	Complete if Known			
Application Number	09,710,703	HEC		VED
Filing Date	November 10, 2000	400	•	
First Named Inventor	John Josef Hench	APR	1 4	2004
Art Unit	2661			
Examiner Name	Unknown	CNNOIO	Jy Ca	nter 2600
Attorney Docket Number	6515P029			

	******		U.S. PATE	ENT DOCUMENTS	
Examiner Initials*	Cite No.¹	Document Number Number - Kind Code² (if known)	Publication Date or Issue Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US-3,814,868	06-04-1974	Bradley	
		US-4,649,505	03-10-1987	Zinser, Jr. et al.	
		US-4,712,064	12-22-1987	Claessen	
		US-4,760,596	07-26-1988	Agrawal et al.	
		US-4,987.569	10-22-1991	Ling et al.	
		US-5,157,690	10-20-1992	Buttle	
		US-5,319,636	06-07-1994	Long et al.	
		US-5,329,547	07-12-1994	Ling	
		US-5,406,552	04-11-1995	Long et al.	
		US-5,548,222	08-20-1996	Jensen et al.	
		US-5,929,896	07-27-1999	Goodman et al.	
		US-5,761,614	06-02-1998	Leitch et al.	
		US-5,862,157	01-19-1999	Bessios	
		US-6,161,209	02-12-2000	Moher	
		US-6,172,970	01-09-2001	Ling et al.	
		US-6,249,762	06-19-2001	Kirsteins et al.	
		US-6,317,495	11-13-2001	Gaikwad et al.	
		US-6,377,636	04-23-2002	Paulraj et al.	
		US-6,434,233	08-13-2002	Bjarnason et al.	
		US-6,442,495	08-27-2002	Fleming-Dahl	

	FOREIGN PATENT DOCUMENTS						
Examiner	Cite	Foreign Patent Document			Pages, Columns, Lines,	_	
Initials*	No.1	Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	•	
		EP0917314A2	05-19-1999	Dyke			
		EP0917314A3	10-10-2001	Dyke			
		WO098/52312A2	11-19-1998	Chow et al.			
		WO098/52312A3	11-19-1998	Chow et al.			
						-	

Examiner	D	Date	
Signature	C	Considered	

^{*}Examiner. Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication.

^{&#}x27;Applicant's unique citation designation number (optional). 'See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 'Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 'For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. 'Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 'Applicant is to place a check mark here if English language Translation is attached.

Supplitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 2 **of** 3

С	omplete if Known
Application Number	09,710,703 RECEIVED
Filing Date	November 10, 2000
First Named Inventor	John Josef Hench PR 1 4 2004
Art Unit	2661
Examiner Name	Unknown Technology Center 2600
Attorney Docket Number	6515P029

	U.S. PATENT DOCUMENTS								
		Document Number			Pages, Columns, Lines, Where				
Examiner Initials*	Cite No.1	Number - Kind Code² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Relevant Passages or Relevant Figures Appear				
		US-4,669,505	06-02-1987	Nelson et al.					
		US-							
		US-							
		US-							
		US-							
		US-							
		US-							
		US-							
		US-							
		US-							
		US-							
		US-							
		US-							
		US-							
		US-							
		US-							
		US-							
		US-							
		US-							
		US-							

	FOREIGN PATENT DOCUMENTS							
Examiner	Cite	Foreign Patent Document			Pages, Columns, Lines,	Ĺ.		
Initials*		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	T°			
	-			· · · · · · · · · · · · · · · · · · ·		ļ		
						_		
				, , , , , , , , , , , , , , , , , , , 		 		
						_		
						-		
						-		
						-		

Examiner	Date	
Signature	Considered	

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication.

'Applicant's unique citation designation number (optional). 'See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 'Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 'For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. 'Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 'Applicant is to place a check mark here if English language Translation is attached.

Based on PTO/SB/08A (08-03) as modified by Blakely, Solokoff, Taylor & Zafman (wlr) 08/11/2003.

Complete if Known ubstitute for form 1449A/PTO **Application Number** 09,710,703 INFORMATION DISCLOSURE Filing Date November 10, 2000 STATEMENT BY APPLICANT First Named Inventor John Josef Hench Art Unit 2661 Technology Center 2600 **Examiner Name** Unknown 3 Sheet 3 of Attorney Docket Number 6515P029

APR 1 4 2004

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
		PETERSEN, BRENT R., et al., "Minimum Mean Square Equalization in Cyclostationary and Stationary Interference-Analysis and Subscriber Line Calculations", Student Member, IEEE Journal, Vol. 9, No. 6, August 1991, pp. 11.	
		VALENTI, CRAIG F., Bellcore, "Cable Crosstalk Parameters and Models", ANSI Contribution TIE1.4/97-302 Technical Subcommitte Working Group Members, Spectral Compatibility, Morristown, NJ 07960, USA, September 22, 1997, pp. 8.	
			1

Examiner	Date	
Signature	Consider	ed .
Cignatare	Consider	eu

Based on PTO/SB/08B (08-03) as modified by Blakely, Solokoff, Taylor & Zafman (wir) 08/11/2003. Send To: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

^{*}Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication.

^{&#}x27;Applicant's unique citation designation number. 'Applicant is to place a check mark here if English language Translation is attached.